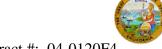
### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015421 Address: 333 Burma Road **Date Inspected:** 24-Jun-2010

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

**Summary of Items Observed:** CWI Inspector: Mr. Liu Hua Jie

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

**OBG Segment Trial Assembly** 

This QA Inspector observed ZPMC welder Mr. Xin Meng, stencil 053742 is using flux cored welding procedure WPS-B-T-2233-B-U2-F to make weld SP373-001-048. This stiffener plate hold back weld is located where OBG segments 9CW and 9DW are joined. This QA Inspector measured a welding current of approximately 310 amps, 30.0 volts, Mr. Xin Meng appears to be certified to make this weld and the base material appears to have been heated with a torch. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wei Dashuai, stencil 051246 is using flux cored welding procedure WPS-B-T-2233-B-U2-F to make weld SP319-001-055. This stiffener plate hold back weld is located where OBG segments 9CW and 9DW are joined. This QA Inspector measured a welding current of approximately 290 amps, 30.5 volts, Mr. Wei Dashuai appears to be certified to make this weld and the base material appears to have been heated with a torch. Items observed on this date appeared to generally comply with

## WELDING INSPECTION REPORT

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applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Han Yiaofeng, stencil 054467 is using shielded metal arc procedure WPS-B-T-4114-1 to make weld DP697-001-013 and -014 adjacent to where OBG Segment 9BE joins segment 9CE. This QA Inspector measured a welding current of approximately 150 amps, the base material was preheated with a torch prior to welding and Mr. Han Yiaofeng appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents. See the photograph for additional information.

This QA Inspector observed ZPMC welder Mr. Dai Lu, stencil 058659 is using shielded metal arc procedure WPS-B-T-4114-1 to make weld DP710-001-013 and -014 adjacent to where OBG Segment 9BE joins segment 9CE. This QA Inspector measured a welding current of approximately 170 amps, the base material was preheated with a torch prior to welding and Mr. Dai Lu appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

ABF issued "Inspection Notification Sheet" number 06224010-1 item #1 informing QA that on 06-24-2010 at 19:00 hours ABF Inspectors will be performing ultrasonic (UT) inspections of hold back repair welds SEG047B-049, SEG045A-012. This weld repair is located between the side plate and the bottom plate on the crossbeam side of OBG segments 8BW and 8CW in the trial assembly area. ABF/Sense UT Inspectors informed this QA Inspector that the weld repair area has two transverse unacceptable areas, one rejection is at Y=760 mm and the other rejection is at Y=780 mm. This QA Inspector performed random visual and ultrasonic inspections utilizing scanning patterns A, B, C and D (AWS D1.5 Fig 6.7) and no additional areas appear to have unacceptable indications. Note: These inspections are being documented and tracked on "Verification Witness Request" documents. See the TL-6027 UT report for additional information concerning this inspection.



#### **Summary of Conversations:**

See Above.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372, who represents the Office of Structural Materials for your project.

# WELDING INSPECTION REPORT

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**Inspected By:** Dawson,Paul Quality Assurance Inspector **Reviewed By:** Carreon, Albert QA Reviewer